

**REMARKS**

Claims 1-36, 39-40, and 65-89 are pending. Claims 37 and 38 have been canceled without prejudice or disclaimer. New claims 65-89 have been added. Claims 1-36, and 39-40 have been amended. In particular, independent claims 1, 26 and 39 have been amended to recite a further distinguishing characteristic – that the data content is encoded for digital radio broadcast transmission. The claims have been amended in other respects for readability, to use preferential language, and to broaden various limitations, and these amendments are not intended to be related to patentability and/or narrow the claim scope. Reconsideration of the present application is respectfully requested.

***Restriction/Election***

Applicant hereby affirms the verbal election of the Group 1 claims (claims 1-36 and 39-64) made via telephone on May 26, 2006 by Mr. Blaney Harper in response to the Office's Restriction Requirement.

***In the Specification***

The specification was objected to because pages were allegedly missing. Applicant respectfully submits that no pages were missing from the originally filed specification but that the originally filed application did not contain claims that began on a new page. On May 14, 2002 Applicant filed corrected papers, including claims that began on a new page but did not include an amendment to the specification to include the portion of the specification originally found on the first page of the claims. Applicant submits herewith an amendment to the specification to correct this oversight. No new subject matter is introduced by entry of this amendment. Accordingly, Applicant respectfully requests withdrawal of this objection.

***Claim Rejections Under 35 U.S.C. § 112***

Claims 1-25 and 44-49 were rejected under 35 U.S.C. § 112, second paragraph. Claims 44-49 have been canceled, and the rejection of these claims is moot. While it is believed that these claims were clear to one of ordinary skill in the art, the claims have been amended in a manner that addresses the Office's concerns to expedite prosecution. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

***Claim Rejections Under 35 U.S.C. § 103***

Claims 1, 8, 13-16, 20-23, 41, 48, 53-56, and 60-62 were rejected under 35 U.S.C. § 103(a) over Pyhalammi et al. (U.S. Publication No. 2006/0073810) in view of Garrity et al. (U.S. Patent No. 6,745,237) (Office Action, paragraph 9). The rejection of claims 41, 48, 53-56 and 60-62 is moot in view of the cancellation of these claims. In addition, Applicant respectfully submits that amended claims 1, 8, 13-16, 20-23 are patentable over the applied references.

Claim 1 recites a gateway for scheduling over the air transmissions of data content. The gateway comprises a network inbound queue for the reception of instructions related to data content, a scheduler for processing said instructions to determine broadcast times and schedule for said data content, a data processor for encoding said data content for digital radio broadcast transmission; an addressing module for processing said instructions for extracting addressing information, and an outbound queue for storing said encoded data content.

In contrast, Pyhalammi discloses a method for delivering mobile content over a cellular wireless network. While cellular wireless networks may employ transmission and reception of RF signals, a cellular wireless transmission is not a digital radio broadcast. A "broadcast" is commonly defined as a "[t]ransmission of a radio or television program or signal for public use" and "to broadcast" is defined as "[t]o transmit (a radio or television program) for public or general use." *The American Heritage® Dictionary of the English Language, Fourth Edition* (2000). In contrast, cellular wireless transmissions are not broadcast by radio or television stations, and the content of the transmissions is not intended for public or general use. Rather, cellular wireless transmissions are received and the content decoded only by a specific user for whom the content is directed. Moreover, Pyhalammi relates to allowing a user of a cellular phone to request content and specify if the user desires the content now or after some pre-determined delay. Pyhalammi requires a user initiated request to deliver data to the requesting user, unlike a digital radio broadcast wherein data is broadcast regardless of whether a particular user has requested it. Pyhalammi also does not disclose a data processor for encoding data content for digital radio broadcast transmission as recited in claim 1.

In addition, the Office's reliance upon Garrity does not remedy this deficiency of Pyhalammi. Garrity is relied upon by the Office for allegedly disclosing a data processor for encoding extracted data content. In Garrity, content is delivered to a user via a computer

network. There is no disclosure in Garrity of a data processor for encoding data content for digital radio broadcast transmission as recited in claim 1. Thus, claim 1 is patentable over the combination of Pyhalammi and Garrity for at least this reason.

Moreover, one of ordinary skill in the art would not be motivated to modify the Pyhalammi and Garrity systems to use digital radio transmissions (see rejection of claim 7 at paragraph 57). One of ordinary skill in the art would not be motivated to modify the substantial infrastructure of cellular telephone communications to use IBOC transmission, or any other form of digital radio broadcast, if that is what is being suggested in the Office's rejection of claim 7. Nor would one of ordinary skill in the art be motivated to modify the computer-network communications system of Garrity to use IBOC transmission, or any other form of digital radio broadcast, if that is what is being suggested, in the Office's rejection of claim 7.

For at least these reasons, claim 1 is patentable over the hypothetical combination of Pyhalammi, Garrity, and Corts et al.

Moreover, claim 1 is patentable over Corts et al. itself at least because Corts et al. contains no disclosure of an addressing module for processing instructions related to data content for extracting addressing information, as recited in claim 1.

Claims 8, 13-16, and 20-23 are allowable at least by virtue of their dependence from claim 1.

Accordingly, reconsideration and withdrawal of the rejections and allowance of claims 1, 8, 13-16, and 20-23 are respectfully requested.

The Office Action includes further rejections of various dependent claims in view of other combinations of applied references and in view of Official Notice:

claims 2, 3, 42, and 43 were rejected under 35 U.S.C. § 103(a) over Pyhalammi in view of Garrity and further in view of Miller (U.S. Publication No. 2003/0055977);

claims 4, 5, 44, and 45 were rejected under 35 U.S.C. § 103(a) over Pyhalammi in view of Garrity and further in view of Kolsky (U.S. Publication No. 2002/0142763);

claims 9 and 49 were rejected under 35 U.S.C. § 103(a) over Pyhalammi in view of Garrity and further in view of Kadyk et al. (U.S. Patent No. 7,046,691);

claims 10, 17, 18, 24, 25, 50, 57, 58, 63, 64 were rejected under 35 U.S.C. § 103(a) over Pyhalammi in view of Garrity and further in view of Official Notice;

claims 11 and 51 were rejected under 35 U.S.C. § 103(a) over Pyhalammi in view of Garrity and further in view of Marlow (U.S. Publication No. 2003/0046670);

claims 12 and 52 were rejected under 35 U.S.C. § 103(a) over Pyhalammi in view of Garrity and further in view of Ellis et al. (U.S. Publication No. 2004/0194131);

claims 19 and 59 were rejected under 35 U.S.C. § 103(a) over Pyhalammi in view of Garrity and further in view of Thompson et al. (U.S. Patent No. 6,907,247);

claims 6 and 46 were rejected under 35 U.S.C. § 103(a) over Pyhalammi in view of Garrity and Kolsky and further in view of Lin et al. (U.S. Publication No. 2002/0146016); and

claims 7 and 47 were rejected under 35 U.S.C. § 103(a) over Pyhalammi in view of Garrity, Kolsky, and Lin and further in view of Corts et al. (U.S. Publication No. 2002/0095228). Applicant respectfully submits that rejections of these claims are either moot or overcome by the amendment to claim 1, from which various ones of these claims depend. The Office's reliance upon these secondary references does not make up for the deficiencies of Pyhalammi and Garrity discussed above with respect to claim 1.

Independent claims 26 and 39 were rejected under 35 U.S.C. § 103(a) over Pyhalammi in view of Garrity and further in view of McConnell et al. (U.S. Patent No. 6,822,954). Applicant respectfully submits that these amended claims are patentable over the applied references.

Claims 26 and 39 are believed to be allowable for at least the reasons similar to those set forth above with respect to claim 1 since claims 26 and 39 recite distinguishing subject matter similar to that recited in claim 1 as discussed above. Moreover, the Office's reliance upon McConnell does not remedy the deficiencies of Pyhalammi in view of Garrity discussed above.

Claims 27-36 and 40 are believed to be allowable for at least by virtue of their dependence from claims 26 and 39. Accordingly, reconsideration and withdrawal of the rejections and allowance of claims 26-36, 39, and 40 is respectfully requested.

Applicant notes that the Office has rejected claim 7 which recited that the broadcast network is an in-band on-channel (IBOC) network, which is a particular type of digital radio broadcast network (Office Action at p. 18, paragraphs 58 and 59). The Office relied on Corts et al. (US 2002/0095228) for allegedly disclosing an IBOC network, using Corts et al. in combination with Pyhalammi and Garrity (the rejection also relies upon Kolsky, US 2002/0142763, and Liu, US 2002/0146016, based upon the dependency of claim 7 upon intervening claims). The Office suggests that it would have been obvious to "to combine the

teachings of Pyhalammi, Garrity, Kolsky, [Liu] and Corts because Corts's teaching of IBOC network would enhance their system by allowing radio broadcasters to transmit digital data over their current analog transmission frequencies," citing page 1, paragraph 2 of Corts.

It is respectfully submitted that the rejection of claim 7 does not make out a *prima facie* case of obviousness and that one of ordinary skill in the art would not have been motivated to modify the mobile cellular systems of Pyhalammi and the computer network system of Garrity to use the IBOC radio broadcast transmission of Corts et al., or any form of digital radio broadcast transmission, contrary to the Office's suggestion. The Office's rejection of claim 7 is nothing more than a circular and conclusory statement that it would be obvious to "combine the teachings" joined with a statement of what IBOC transmission permits in the context of AM and FM radio broadcasting – namely, the transmission of digital data over existing AM and FM radio broadcast frequencies. As such, the Office's suggested "combination of teachings" is facially improper because it contains no detailed explanation whatsoever of what is allegedly being modified or combined.

Additionally, Applicants traverse the taking of official notice with regard to claims 18, 25, 58, and 64 (See, paragraph 43 of the Office Action) in so far as the Examiner alleges that digital broadcasting formats are well known in the art. In the context of Pyhalammi's mobile cellular system and Garrity's computer network system, it would not have been well known or obvious to use a "digital broadcast format," at least for reasons previously provided herein. It is respectfully requested that the Examiner provide prior art evidencing that digital broadcasting formats are well known in the art if this ground for rejection is maintained.

### **New Claims**

Claims 65-89 have been added herein and are dependent upon claim 1. These claims recite subject matter similar to that initially presented in claims 41-46, and these claims are allowable at least by virtue of dependency.

### **Conclusion**

Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Application No. 10/007,338  
Response dated December 22, 2006  
Page 19

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

By:



Vishal V. Khatri  
Registration No. 51,873  
Direct No. (202) 879-3607

**JONES DAY**  
51 Louisiana Avenue, N.W.  
Washington D.C. 20001-2113  
Tel: (202) 879-3939  
Fax: (202) 626-1700

Date: December 22, 2006